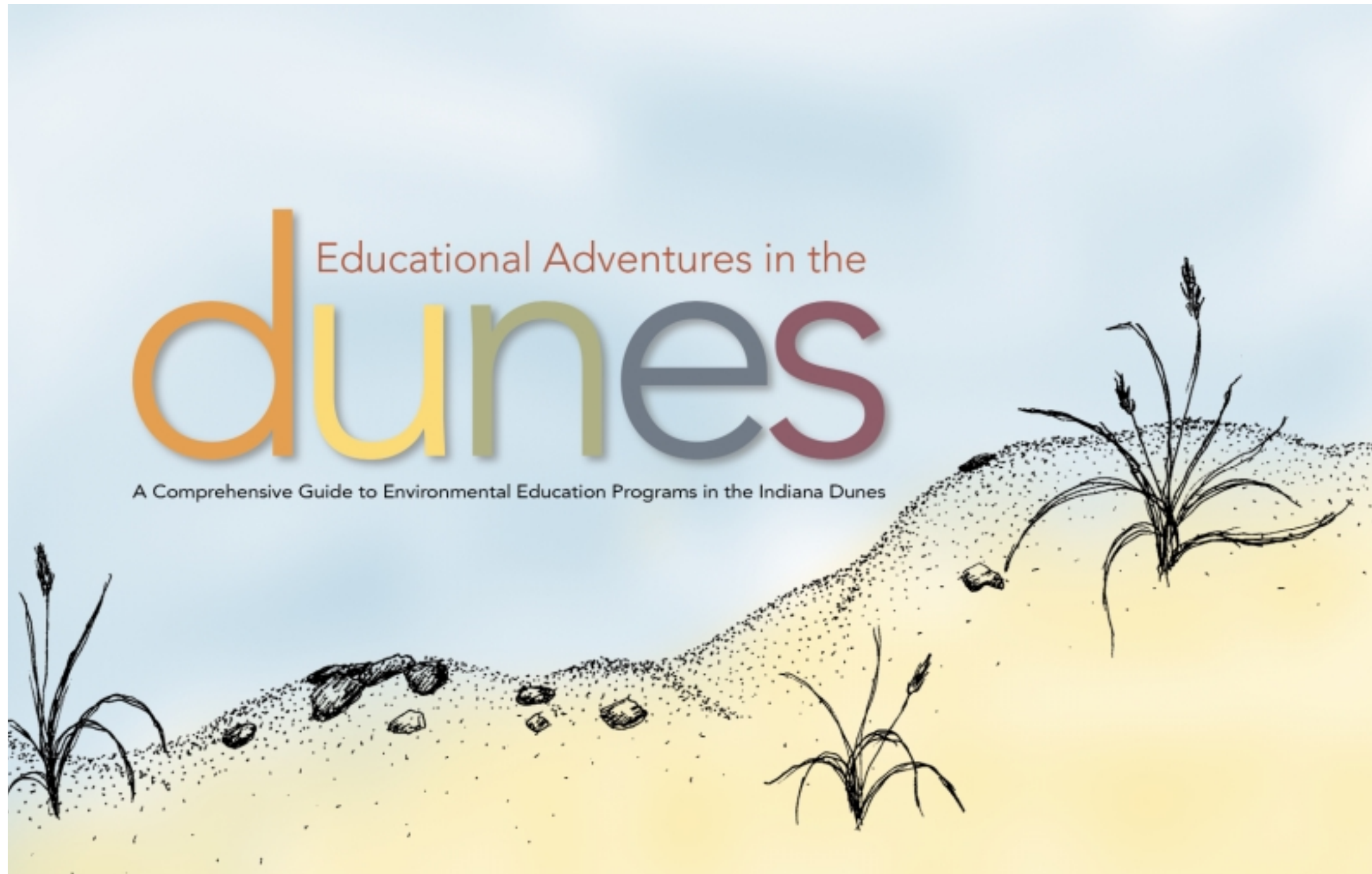


POSTAGE



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Cover drawing by Cora Thiele.

# Indiana Dunes Environmental Education





The Indiana dunes have a long, fascinating history of attracting scientists and students alike to study and explore its globally rare ecosystems. The process of unlocking the mysteries of the Indiana dunes began in the late 1800's with Dr. Henry Cowles and still continues today. In the spirit of further utilizing the Indiana dunes as an educational tool, organizations throughout the area offer a wide variety of environmental education programs. This guide, "Educational Adventures in the Dunes", provides a comprehensive list of the many programs available. It is designed to assist educators and youth group leaders in understanding and using the resources available to them.

The first section of the guide provides an at-a-glance matrix that lists the programs by age group. Next to each program listing is a page number that, if referenced, will provide more in depth information about the program. Each participating organization has their own section that explains their unique facilities and programs. Lastly, teachers' workshops are listed in the back.






The potential uses of the Indiana dunes as a valuable teaching tool are abundant. This guide will enable educators to choose the programs that are most appropriate for them and their particular group of learners.

at-a-glance matrix






	Indiana Dunes Environmental Learning Center	
	Indiana Dunes National Lakeshore	
	Indiana Dunes State Park	
	Lake County Solid Waste Management District	
	Richardson Wildlife Sanctuary	

programs offered	pre-k-5	6-8	9-12	all ages					page
Frog in the Bog	•				•	•	\$90	year round	2
Winter Survival in the Dunes *NEW	•	•	•		•	•	\$54	nov.-feb.	2
Mighty Acorns	•	•				•	no charge	sep.-may	2
Energy Matters		•	•		•	•	\$95	year round	2
DuneSCOPES			•		•	•	variable	year round	2
Discover	•					•	no charge	year round	4
The Chellbergs had a Farm	•					•	no charge	nov.-aug.	4
Talk with the Animals	•					•	no charge	spring/sum.	4
Winter Wonderland	•					•	no charge	winter	4
Mt. Baldy Moves/West Beach Walk	•					•	no charge	sp./sum./fall	4
Autumn Harvest				•		•	no charge	sep.-oct.	4
Maple Sugar Time				•		•	no charge	feb.-mar.	4
Fall Fanfare	•	•				•	no charge	fall	5
Winter Exploration	•	•				•	no charge	winter	5
Potawatomis and Fur Traders	•	•				•	no charge	year round	5
A Grain of Truth	•	•				•	no charge	sp./sum./fall	5
Lake Michigan Alive	•	•	•			•	no charge	year round	5
Water World	•	•	•			•	no charge	year round	5
Habitat Hike	•	•	•			•	no charge	year round	6
Celebration Earth	•	•	•			•	no charge	spring/sum.	6
Reflections on Snow	•	•	•			•	no charge	winter	6
Pinhook Bog		•	•			•	no charge	apr.-nov.	6
Secrets of Succession		•	•			•	no charge	sp./sum./fall	6

Programs and prices subject to change or cancellation without prior notification.

programs offered	pre-k-5	6-8	9-12	all ages					
Touch the Earth	•						no charge	year round	8
Our Feathered Friends	•						no charge	year round	8
Habitat Happenings	•						no charge	year round	8
Beginning Birding	•	•	•				no charge	year round	8
A March Through Time	•	•	•				no charge	year round	8
Wetland Wonders	•	•					no charge	sp./sum./fall	8
Succession Stroll	•	•	•	•			no charge	year round	8
Ladybugs	•					•	no charge	year round	10
Buzzing a Hive	•					•	no charge	year round	10
Rain Drops and Oil Drops	•					•	no charge	year round	10
Worm World	•	•	•	•		•	no charge	year round	10
Earth Walks	•	•	•	•		•	no charge	year round	10
Homes in a Pond	•	•				•	no charge	year round	10
Butterflies P-3	•					•	no charge	year round	10
Audiovisual Material & Traveling Trunks				•			no charge	year round	11
Non-circulating Library								call or email	11
Sanctuary Visits								call or email	11
Workshops, Consultations &...				•		•			11

# legend

				
residential	standard-based	price	season/dates available	page found on in guide



# Indiana Dunes Environmental Learning Center

Indiana Dunes Environmental Learning Center offers classrooms of woodlands, prairies, wetlands, dunes, and beaches. Established in 1998, the Learning Center serves as an education center and environmental learning laboratory on the site of the National Park Service's Camp Good Fellow. Facilities include 10 modern cabins that accommodate 80 participants, each with heating, air conditioning, and a private bath. The Cowles Lodge provides groups with a spacious and modern dining and meeting center. These facilities, a scenic environment, and the professional, caring staff make the Learning Center a truly unique educational resource that heightens environmental awareness of the children, adults, and educators that it serves.

Residential programs require that the school provide one adult chaperon to every seven children. Only chaperons that exceed this ratio are expected to pay the program cost.

## Indiana Dunes Environmental Learning Center

700 Howe Road • Chesterton Indiana, 46304

phone: 219-395-9555 • fax: 219-395-8160

email: [idelc@netnitco.net](mailto:idelc@netnitco.net) • [www.nps.gov/indu/learning/](http://www.nps.gov/indu/learning/)



INDIANA DUNES  
ENVIRONMENTAL  
LEARNING CENTER

### Frog in the Bog

**Goal:** This program fosters an increased awareness, understanding, and appreciation for the unique environment of the dunes. It also assists teachers in meeting state and national science education standards, and provides hands-on activities that emphasize personal inquiry, observation, science, math, and critical thinking skills.

Frog in the Bog is a science based program that actively involves students in a three-day/two-night experience combining discovery, adventure and fun with math, science and social studies. Students, led by Learning Center staff, participate in field oriented hands-on learning featuring the natural history of the dunes, the interconnection of human and natural environments, and the rich biological diversity found in the southern Lake Michigan region.

**Cost:** \$90 per student **Program availability:** Year round

**Age group:** 4th-6th grade **Min./Max. group size:** 15/70

**Location:** Indiana Dunes Environmental Learning Center

### Winter Survival in the Dunes \*New Program\*

**Goal:** An understanding of the fascinating winter adaptations of plants and animals in the Indiana dunes is achieved during this program.

This two day/one night program provides a mixture of indoor and outdoor activities that explore winter changes in the dunes and how human, plant and animal inhabitants adapt to them. Learning Center staff engage students in the hands-on activities that include a variety of winter games, arts and crafts and exploration of the environment. Weather permitting, students will have the opportunity to snow shoe or cross-country ski.

**Cost:** \$54 per student **Program availability:** November-February

**Age group:** 4th-9th grade **Min./Max. group size:** 15/70

**Location:** Indiana Dunes Environmental Learning Center

### Energy Matters

**Goal:** Basic energy concepts are taught and participants are motivated to think critically in order to make better choices about energy use and consumption.

Energy Matters' three day/two night program provides an in-depth experience with nature and its relationship to energy sources. All of the activities use a variety of critical thinking, language arts, math, social studies, and science skills. Program highlights include a guided tour of a local energy generating plant, a trip to Mt. Baldy and team building activities that explore potential and kinetic energy.

**Cost:** \$95 per student **Program availability:** Year round

**Age group:** 7th-9th grade **Min./Max. group size:** 15/70

**Location:** Indiana Dunes Environmental Learning Center

### Mighty Acorns

**Goal:** Mighty Acorns engages urban students in exploration and stewardship of the prairies, woodlands, and wetlands in their own backyards. This program introduces urban youth to natural areas within their community in a unique way that fosters a personal connection to the environment.

Learning Center and National Lakeshore staff work in the classroom and on field trips with teachers, trained volunteers, and students to develop and implement this locally based stewardship program. Mighty Acorns classes participate in three seasonal field trips to an "adopted" local natural area. Students explore the natural area and act as stewards, doing activities such as seed collecting and planting. Repeat visits to the field site to monitor the results of their work strengthen urban students' connection with nature.

**Cost:** No charge **Program availability:** September-May

**Age group:** 4th-6th grade **Min./Max. group size:** 15/70

**Location:** School and nearby natural area

### DuneSCOPES

**Goal:** Team building and student leadership are emphasized during this program that provides real world applications of science and math skills. DuneSCOPES offers an opportunity for students to practice scientific method, inquiry, observation, and analytical skills.

Teams of students with their teacher select an environmental monitoring or stewardship project. Projects may include water monitoring, species monitoring, wetland/prairie restoration, or other topics. Students develop a hypothesis, conduct an investigation and analyze data. Projects are designed to last from several months to a full academic year and incorporate a residential component during which a significant portion of the project can be implemented.

This program is also offered through day visits with National Lakeshore Staff.

**Cost:** Variable **Program availability:** Year round

**Age group:** 9th-12th grade **Min./Max. group size:** 15/70

**Location:** Indiana Dunes Environmental Learning Center





## Indiana Dunes National Lakeshore

The Indiana Dunes National Lakeshore was established in 1966 "...to preserve for the educational, inspirational, and recreational use of the public certain portions of the Indiana dunes." Today the park is comprised of over 15,000 acres of dunes, oak savannas, swamps, bogs, marshes, prairies, rivers and wetlands. The amazing variety of natural communities located within such a small geographic area makes the Indiana Dunes National Lakeshore a truly unique educational and recreational resource.

Thousands of students participate in education programs at the National Lakeshore every year. The park offers programs at various locations throughout Lake and Porter Counties, such as the Paul H. Douglas Center for Environmental Education, the Dorothy Buell Memorial Visitor Center, the historic areas of Bailly Homestead and Chellberg Farm, and the natural areas and trails throughout the park. It is a wonderful place to bring students for ranger-led programs such as those listed below or for self-guided programs. Teacher activity guides are available upon request for West Beach and Miller Woods or can be downloaded from the National Lakeshore's website.

### Indiana Dunes National Lakeshore

1100 North Mineral Springs Road • Porter, Indiana 46304  
phone: 219-926-7561 ext. 243, or toll-free at 1-800-959-9174, ext. 243  
[www.nps.gov/indu/education](http://www.nps.gov/indu/education)

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**Note - It is important to call on or after the following dates for ranger-led programs.**

Scheduling for fall programs that run  
September 30 through November 15 begins August 26.

Scheduling for winter programs that run  
December 2 through February 14 begins October 28.

Scheduling for Maple Sugar Time programs that run  
February 26 through March 19 begins January 8.

Scheduling for spring/summer programs that run  
April 7 through August 15 begins January 8.

### Discover

**Goal:** To explore nature's diversity using the senses.  
Discover the wonders of nature along a wooded trail by using your senses.  
**Program availability:** Year round  
**Age group:** Preschool-3rd grade **Max. group size:** 90  
**Location & Length:** Douglas Center or Visitor Center, 1 hour

### The Chellbergs had a Farm

**Goal:** To experience and learn about Indiana's early farming traditions.  
Step back in time and discover farm life in the early 1900's. Feed pigs, horses, chickens, and a cow. Play farm games and visit an old time farm house.  
**Program availability:** November-August  
**Age group:** Preschool-3rd grade **Max. group size:** 90  
**Location & Length:** Chellberg Farm, 1 hour

### Talk With the Animals

**Goal:** To introduce young students to the variety of animals of the dunes.  
Puppet characters come alive to tell a story of life in the forest. After the show, hike a trail to search for their friends.  
**Program availability:** Spring/summer  
**Age group:** Preschool-1st grade  
**Min./Max. group size:** 40/70 at DC; 100 at VC  
**Location & Length:** Douglas Center or Visitor Center, 1 hour

### Winter Wonderland

**Goal:** To become familiar with the wonders of the winter season.  
Puppet animals reveal adaptations of hibernation, migration, and food storage through an entertaining presentation. If weather permits, students will explore winter conditions during a short hike after the puppet show.  
**Program availability:** Winter **Age group:** Preschool-1st grade  
**Min./Max. group size:** 40/70 at VC or 100 at DC.  
**Location & Length:** Douglas Center or Visitor Center, 1 hour

### Mount Baldy Moves or West Beach Walk

**Goal:** To explore the dunes and experience the forces of nature that created them.  
Observe water, wind, and waves in action and learn how they work together to form mountains of sand.  
**Program availability:** Spring/summer/fall  
**Age group:** Preschool-3rd grade **Max. group size:** 90  
**Location & Length:** Mount Baldy or West Beach, 1 hour

### Autumn Harvest

**Goal:** To experience old-time life on a farm in the fall.  
Sample harvest time at a turn-of-the-century farm. Gather sorghum, press cider, help with chores or play farm games. Enjoy the sights and smells of an old-time farmhouse and barn.  
**Program availability:** September 30 - October 18  
**Age group:** All grades **Max. group size:** 60  
**Location & Length:** Chellberg Farm, 1.75 hours

### Maple Sugar Time

**Goal:** To learn and experience the making of this purely American product.  
Learn about "horse-power", examine maple trees, and see the Native American, pioneer and sugar shack methods of making maple sugar and syrup. Warm up during a tour of the Chellbergs' 19th century farm house and visit the animals in the barn.  
**Program availability:** February 26 - March 19  
**Age group:** All ages **Max. group size:** 60  
**Location & Length:** Chellberg Farm, 1.75 hours

No charge for any National Lakeshore programs.

### Fall Fanfare

**Goal:** Experience and learn about the changing of the seasons.

Cool weather and shorter days bring beautiful changes. Discover the flurry of activity as plants and animals prepare for winter. Students teach each other through presentations on fall topics before and during the field trip. Classroom activities and preparation are integral to this program.

**Program availability:** Fall

**Age group:** 1st-6th grade **Max. group size:** 90

**Location & Length:** Kemil Beach or Douglas Center, 2 hours

### Winter Exploration

**Goal:** To experience and learn about the beauty and ecology of winter.

Explore the beauty of the winter woods during a nature hike after viewing an indoor slide show focusing on animal adaptations. Learn how plants and animals adapt to survive in the winter. Snowshoes are provided. If there is insufficient snow, a hike will be led.

**Program availability:** Winter

**Age group:** 3rd-6th grades **Min./Max. group size:** 36

**Location & Length:** Visitor Center, 1.5 hours

### Potawatomis and Fur Traders

**Goal:** To experience local history focusing on Native American lifestyles and the fur trade.

Journey back in time to learn about the lifestyles of the Native Americans, fur traders, and voyagers during this period of change in northwest Indiana.

**Program availability:** Year round

**Age group:** 3rd-8th grade **Min./Max. group size:** 90

**Location & Length:** Bailly Homestead, 2 hours

### A Grain of Truth

**Goal:** To explore the dunes and gain a personal experience of how they came to be.

Observe howling winds and powerful waves at work creating, shaping, eroding, and moving sand dunes. Hike the foredunes and beach to learn about the processes of dune building, glaciation and erosion.

**Program availability:** Spring/summer/fall

**Age group:** 4th-6th grade **Max. group size:** 90

**Location & Length:** West Beach or Mount Baldy, 1.5 hours

### Lake Michigan Alive

**Goal:** To appreciate the diversity of life within this region's most important natural resource and learn about some of the issues facing Lake Michigan.

Dress a student as a fish. Play a food chain game. View preserved sea lamprey and trout. Students are encouraged to help care for the Great Lakes. This program begins indoors and includes a trip out to the lake at the Marquette Park Aquatorium.

**Program availability:** Year round

**Age group:** 4th-12th grade **Max. group size:** 90

**Location & Length:** Douglas Center, 1.5 hours including beach hike

### Water World

**Goal:** To experience and explore the diversity of life within a wetland.

Armed with nets and pans, investigate the rich diversity of pond life. Examine the pond's plants and animals and learn the importance of conserving our water resources. For a more in-depth experience, students can take the 3-hour hike option to explore Lake Michigan's water resources.

**Program availability:** Spring/summer/fall

**Age group:** 4th-12th grade **Max. group size:** 48

**Location & Length:** Douglas Center, 2 or 3 hours

### Habitat Hike

**Goal:** To learn about the importance of biodiversity through a hike into the National Lakeshore's many habitats.

Discover why the Indiana dunes has almost 1400 species of plants, ranking it 4th highest of all National Park areas! Explore forest, dunes, a swamp, and sand prairie, while studying the environmental factors that affect plant survival.

**Program availability:** Year round

**Age group:** 4th-12th grade **Max. group size:** 90

**Location & Length:** Kemil Beach Parking Lot, 2 hours

### Celebration Earth

**Goal:** To appreciate the unique features of Miller Woods and understand some of the issues that face natural areas.

Join us to discover the beauty of the oak savannas, singing frogs, and wetland birds during a two and a half mile hike to dunes, ponds, and wetlands. This half-day program includes indoor and outdoor activities.

**Program availability:** Spring/summer

**Age group:** 4th-12th grade **Min./Max. group size:** 90

**Location & Length:** Douglas Center, 3 hours

### Reflections on Snow

**Goal:** To appreciate and learn about the beauty and ecology of winter.

Discover the thrill of cross country skiing. Indoor activities explore tracking, predation, and winter habitats. Ski equipment provided. If snow is insufficient, a hike will be led.

**Program availability:** Winter

**Age group:** 5th-12th grade **Max. group size:** 60

**Location & Length:** Douglas Center, 3 hours

### Pinhook Bog

**Goal:** To learn about and appreciate a rare, fragile gift of the glaciers.

Hike into the strange and unique world of the bog. Walk on a floating mat of sphagnum moss and discover insect-eating plants.

**Program availability:** Mid-April through mid-November

**Age group:** 6th-12th grade **Max. group size:** 30

**Location & Length:** Pinhook Bog (meet at the Visitor Center), 2 hours (includes travel time between VC and bog)

### Secrets of Succession

**Goal:** To experience and appreciate the variety of plant communities found in the dunes.

Follow the legacy of early dunes scientist Henry Chandler Cowles and hike from the beach over foredunes and through forests. By exploring the environment, discover the forces that shape the dunes and produce this unique succession of plants.

**Program availability:** Fall, spring, summer

**Age group:** 7th-12th grade **Max. group size:** 90

**Location & Length:** West Beach or Mount Baldy, 1.5 hours



## Indiana Dunes State Park

Indiana Dunes State Park, established in 1925, is located in Porter County within the boundaries of the Indiana Dunes National Lakeshore. It consists of 2,182 acres of primitive, historical, and amazingly unique Hoosier landscape. Some of the most diverse flora and fauna of the Midwest reside in its sand dunes, beaches, wetlands, and woodlands.

Three miles of beach afford spectacular views of Lake Michigan and offer swimming opportunities for those visiting during the summer season. Fifteen miles of hiking trails are available year round and lead visitors through a variety of habitats. Trails range in difficulty from easy to rugged. Picnic areas are located throughout the park with tables, grills, toilet facilities, playground equipment, shelters, and play fields. Picnic shelters can be reserved for a fee. Otherwise, they are available on a first-come, first-served basis. Tent camping is available for organized youth groups under adult supervision.

Our Interpretive Naturalist Service offers the following programs. Programs on other topics can often be designed to meet your specific needs and the needs of your students.

### Indiana Dunes State Park

(at the north end of Indiana State Road 49) • 1600 North 25 East • Chesterton, IN 46304  
phone: 219-926-1390 or 219-926-1952 • fax: 219-926-9113  
email: dunesnc@dnr.state.in.us

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**DNR**  
Indiana Department  
of Natural Resources



### Touch the Earth

**Goal:** To increase student awareness of the dunes environment by encouraging utilization of multiple senses.

Using their five senses students explore the wonders of nature, learn the importance of senses, and discover how animals use their senses to help them survive.

**Program availability:** Year round **Age group:** Preschool-2nd

**Min./Max. group size:** 10/variable **Location and length:** Indiana Dunes State Park Nature Center, 45 minutes - 1.5 hours

### Our Feathered Friends

**Goal:** Students learn many of the adaptations that equip birds for survival, and discover how different species make their homes in different habitats within the park.

Explore the world of birds, their habits and duneland habitats. After an introductory slide presentation, students participate in an adaptation activity, read a short book about birds, draw a bird visiting our bird feeders, then head for the trails for a bird walk.

**Program availability:** Year round **Age group:** 2nd-3rd grade **Min./Max. group size:** 10/variable **Location and length:** Indiana Dunes State Park Nature Center, 1.5 hours

### Habitat Happenings

**Goal:** Students learn about park habitats and food chains.

Everyone needs a home and everyone needs a habitat! After an introductory slide presentation, students engage in activities about habitats and food chains. An exploratory hike through three different habitats rounds out the day.

**Program availability:** Year round **Age group:** 2nd-5th grade

**Min./Max. group size:** 10/variable **Location and length:** Indiana Dunes State Park Nature Center, 1.5 - 2 hours

### Beginning Birding

**Goal:** Students increase their awareness of bird adaptations and behavior.

Students will sharpen their observation skills, make a sketch book, and learn to differentiate between a variety of local bird species.

**Program availability:** Year round **Age group:** 4th grade and up

**Min./Max. group size:** 10/variable **Location and length:** Indiana Dunes State Park Nature Center, 1.5 - 2 hours

### A March Through Time

**Goal:** Students discover many of the reasons why Indiana Dunes State Park was formed and learn that different groups of people have had different attitudes about the Indiana dunes throughout recent history.

Participants hike a historical time line to discover the many people that have explored the Indiana dunes. Students hike through the dunes, looking at the landscape from the perspective of many of the people who valued the Indiana dunes for different reasons. This program emphasizes events closely correlated with Indiana history studies.

**Program availability:** Year round **Age group:** 4th grade and up

**Min./Max. group size:** 10/variable **Location and length:** Indiana Dunes State Park Nature Center, 2 hours

### Wetland Wonders

**Goal:** Students learn that wetlands are valuable resources.

Wetlands are extremely important habitats, and many today are in danger! Through slides, activities, and first hand exploration, students discover the significance of these areas.

**Program availability:** Spring/summer/fall **Age group:** 3rd-8th grade

**Min./Max. group size:** 10/variable **Location and length:** Indiana Dunes State Park Nature Center, 2 hours

### Succession Stroll

**Goal:** Students gain an understanding of succession and learn to identify successional stages of dune development.

Because of Henry Cowles' work with succession in the late 1800's, Indiana dunes are considered the "birthplace of ecology"! Stroll through the dunes and discover how they were formed.

**Program availability:** Year round

**Age group:** 5th-8th grade **Min./Max. group size:** 10/variable

**Location and length:** Indiana Dunes State Park Nature Center/ mid-program transportation is required, 2 hours

No charge for any State Park programs.  
Prior arrangements can be made to waive park entrance fees for school groups.



## Lake County Solid Waste Management District

The Lake County Solid Waste Management District is a government entity created by a statute in 1991 to develop a 20 year plan for the management of solid waste within the county. From its inception, the District identified education as a key vehicle to achieve its mission.

The District has teamed up with the Indiana Dunes National Lakeshore to offer fun filled days at the Paul H. Douglas Center for Environmental Education located on North Lake Street in the Miller section of Gary. Groups spend the day in award winning programs with guided exploration of the dunes. As with all District activities, programs at the Douglas Center emphasize learning by doing, interacting, and problem solving. Several of these programs have been honored with the Governor's Award and The Solid Waste Association of North America's Award for Public Education.

The District also has two other educational field trip sites: the Environmental Education Center in Hammond and the Enviroom in Merrillville. In addition, the District has two Enviromobiles that bring environmental education directly to schools.

### Lake County Solid Waste Management District

7820 Broadway • Merrillville, IN 46410

phone: 219-689-3361 • home office: 219-662-2967 • fax: 219-769-3890

bbladybugs@yahoo.com



### Ladybugs

**Goal:** Ladybugs is science and math based.Children absorb math concepts of counting, symmetry, and pattern as they indulge their curiosity about these charming insects.  
Learn about the body structure, life cycle, and defensive behavior of ladybugs. Important lessons about the role of ladybugs in the environment are emphasized.  
**Program availability:** Year round **Age group:** Preschool-5th grade  
**Min/Max. group size:** 10/90 **Location & Length:** Douglas Center for Environmental Education, 1-4 hours

### Buzzing a Hive

**Goal:** In this fascinating program learn about the complex social behavior, communication, and hive environment of the honeybee. This science based program also teaches how pesticides can affect bees and other helpful insects. Students get a good introduction to the honeybees extravagant communication system and intricate behavior. In a series of activities that build on one another children make paper bee models to learn about bee body structure, act as bees in a beehive drama, and learn about bee predators and honey robbers. No Live bees.  
**Program availability:** Year round **Age group:** Preschool-5th grade  
**Min/Max. group size:** 10/90 **Location & Length:** Douglas Center for Environmental Education, 1-4 hours

### Rain Drops and Oil Drops

**Goal:** This is a science based program to introduce students to the properties of matter. The activities prompt discussions about environmental issues, and educate students about household hazardous wastes.  
In a series of fun and fluid activities, students explore the properties of different liquids. They sort, classify, and observe how food coloring moves through different liquids. They leave with a Great Lake in a bottle.  
**Program availability:** Year round **Age group:** 1st-4th grade  
**Min/Max. group size:** 10/90 **Location & Length:** Douglas Center, 1-4 hours

### Worm World

**Goal:** In this science based program, students become familiar with cycles, relationships, ecosystem structures and function as they explore a worm's world. Children have a fascination with dirt. Worm World explores the properties of soil,

a natural resource we take for granted. This program brings this hidden world up close, deepening students understanding of and connection to all living things.  
**Program availability:** Year round **Age group:** Preschool-8th grade  
**Min/Max. group size:** 10/90 **Location & Length:** Douglas Center for Environmental Education, 1-4 hours

### Earth Walks

**Goal:** Learn more about the environment in our own backyard, the Indiana Dunes National Lakeshore.  
Miller Woods makes a great classroom. Come wander the rolling oak savannas and spectacular wetlands of the Indiana Dunes National Lakeshore.  
**Program availability:** Year round **Age group:** Preschool-8th grade  
**Min/Max. group size:** 10/90 **Location & Length:** Douglas Center for Environmental Education, 1-4 hours

### Homes in a Pond

**Goal:** This interactive life science program conveys key environmental concepts, habitats, life cycles, and diversity of life.  
Come to the Douglas Center for some close encounters with creatures that live in ponds. Using nets, explore our outdoor pond where smaller forms of life, such as dragonfly nymphs, snails, and water boatmen make their home.  
**Program availability:** Year round **Age group:** 1st - 6th grade  
**Min/Max. group size:** 10/90 **Location & Length:** Douglas Center for Environmental Education, 1-4 hours

### Butterflies

**Goal:** Butterflies introduce students to the concept of Endangered Species. Students learn basic biological concepts such as protective coloration and strategies employed by both hunters and hunted.  
This program opens with a metaphoric wide-angle lens, creating and populating a mural meadow in which paper animals will gradually tell the stories of camouflage, predator/prey and survival behavior in the real outdoors.  
**Program availability:** Year round **Age group:** Preschool-3rd grade  
**Min./Max. group size:** 10/90 **Location & Length:** Douglas Center for Environmental Education, 1-4 hours

No charge for any District programs.





# Richardson Wildlife Sanctuary

The Richardson Wildlife Sanctuary is a non-profit organization dedicated to education, research, and the preservation of the natural history and ecology of the southern Lake Michigan region. The Sanctuary's collection of audiovisual programs includes a variety of works that are available on free loan to educators in the region.

## Audiovisual Material & Traveling Trunks

Videos and traveling trunks, available on free loan to educators, provide excellent introductory and follow up materials for field trips to the dunes. The audiovisual catalog and list of traveling trunks is available on-line via the Sanctuary website at [www.richardsonwildlifesanctuary.org](http://www.richardsonwildlifesanctuary.org)

## Sanctuary Visits

The Sanctuary land is available to the public by appointment only.

## Workshops, Consultations, and Presentations

The Program Director/Ecologist can be contacted for professional development workshops, consultations, and presentations.

## Richardson Wildlife Sanctuary

64 West Road - Dune Acres • Chesterton, IN 46304  
phone: 219-787-8983 • fax: 219-787-1341  
email: [rwsa@myvine.com](mailto:rwsa@myvine.com) • [www.richardsonwildlifesanctuary.org](http://www.richardsonwildlifesanctuary.org)

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# Workshops for Educators and Group Leaders

## Project Learning Tree

Project Learning Tree covers topics in forestry, wildlife, soil, air, and water. This exciting program helps educators teach youth to be stewards of the land. Project Learning Tree also helps improve understanding of conservation and the use of natural resources. Curriculum guides with more than 100 hands-on activities for grades K-12 are provided upon completion of the workshop.

**Indiana Dunes State Park, Richardson Wildlife Sanctuary, and Great Lakes Research and Education Center**

**Register at:** 219-926-1390 or 219-787-8983 by October 26, 2002

**Cost:** \$15.00 **Date/time:** Saturday, November 2, 9:30 a.m. - 3:30 p.m.

**Location:** Indiana Dunes State Park Nature Center **Credit Available:** Yes

## Project WET

Project WET is a non-biased supplemental curriculum that enhances student learning in chemistry, watersheds, wetlands, aquatic wildlife, and water quality. The Project WET guide contains more than 90 K-12 broad-based, hands-on, easy-to-use (and fun) water resource activities!

**Indiana Dunes State Park, Richardson Wildlife Sanctuary, and Great Lakes Research and Education Center**

**Register at:** 219-926-1390 or 219-787-8983 by January 18

**Cost:** \$15.00 **Date/time:** Saturday, January 25, 2003, 9:30 a.m. - 3:30 p.m. **Location:** Indiana Dunes State Park Nature Center

**Credit Available:** Yes

## Project Wild

Project Wild helps teachers develop awareness, knowledge, skills and commitment in their students so that they can make informed decisions and act responsibly concerning wildlife and the environment. Guides containing 122 activities for use with K-12 classes and groups are provided.

**Indiana Dunes State Park, Richardson Wildlife Sanctuary, and Great Lakes Research and Education Center**

**Register at:** 219-926-1390 or 219-787-8983 by March 22, 2003

**Cost:** no charge (Paid for by the Indiana Non-game and

Endangered Wildlife Fund) **Date/time:** Saturday, March 29, 2003 9:30 a.m. - 3:30 p.m.. **Location:** Indiana Dunes State Park Nature Center **Credit Available:** Yes

## Project Learning Tree

This award-winning, interdisciplinary environmental education program is designed for educators working with students pre-K through 12. It uses the forest as a "window" into natural environments, helping students gain an awareness and knowledge of the world around them, as well as their place in it.

**Lake County Solid Waste Management District**

219-689-3361 / 219-662-2967 for available dates and times.

**Cost:** No charge **Credit Available:** Yes

## Project WET

This teachers' workshop facilitates and promotes awareness, appreciation, knowledge, and stewardship of water resources through the development and dissemination of classroom ready teaching aids. It covers many water related topics including watersheds, wetlands, aquatic wildlife, water quality, water management, water economics, water conservation, and water stewardship.

**Lake County Solid Waste Management District**

**Register at:** 219-689-3361 / 219-662-2967 for available dates and times. **Cost:** No charge

## GEMS

Great Explorations in Math and Science (GEMS), recently lauded by the Department of Education's Expert Panel on Mathematics and Science Education, is a growing resource for the advancement of inquiry-based science and mathematics education. GEMS has published over 70 teacher's guides and handbooks, offers specialized workshops, and maintains a national network of teacher-training sites and centers.

**Lake County Solid Waste Management District**

219-689-3361 / 219-662-2967 **Date/time:** Tuesday, October 1, 2002, 9:30 a.m. - 3:00 p.m. or Tuesday, February 18, 2003, 9:30 a.m. - 3:00 p.m. **Cost:** No charge

### WISE Teacher Education

Teachers who complete the Waste Information Series for Education (WISE) Teacher Training sessions receive a curriculum binder, student readers, classroom support materials, and access to the Enviromobile.

**Lake County Solid Waste Management District**

219-689-3361 / 219-769-3820 for available dates and times.

**Cost:** No charge **Date/time:** Fridays, September 13, 200; October 11, 2002; February 28, 2003.

### Great Lakes Teachers' Workshop

Educators participate in a variety of hands-on activities focusing on the Great Lakes. Participants receive a wealth of information on our Great Lakes and two supplemental curriculum books full of fun-to-use activities!

219-926-1390 or 219-787-8983 by June 14, 2003

**Cost:** No charge (Sponsored by the Friends of Indiana Dunes, The Richardson Wildlife Sanctuary, The Great Lakes Research and Education Center, and Indiana Dunes State Park.) **Date/time:** Saturday, June 21, 9:30 a.m. - 3:30 p.m.

### Dunes Educator Institutes

Throughout the academic year, the Indiana Dunes National Lakeshore and the Environmental Learning Center provide high-quality professional development opportunities for k-12 teachers and non-formal educators. Illinois teachers can receive continuing education units (CEUs). Indiana University Northwest will offer one hour of graduate credit for an extra fee. Fees listed here are only for the registration, materials, meals, and lodging associated with the workshop.

**Indiana Dunes Environmental Learning Center**

219-395-9555 • Fax: 219-395-8160

**Email:** idelc@netnitco.net **Web:** www.nps.con/indu/education

### Dunes 101: Introduction to the Dunes

This workshop will be offered over the course of two consecutive Saturdays and will provide an overview of the resources available at the National Lakeshore and the key concepts that can be explored with classes in the dunes. **Cost:** \$62

**Date/time:** November 16 & 23; 8:30 am. - 5:00 pm. each Saturday.

### Dunes 102: Geology and Winter Ecology

Embrace winter and learn about the geologic formations and foundations of this area. Participants will ski and snowshoe if the weather permits as they learn about glacial geology and Great Lakes formation. **Cost:** \$62 **Date/time:** Begins Friday, January 31, 4:00 pm.; Ends Saturday February 1, 5:00 pm.

### Grantwriting:101 for Educators

Many opportunities exist for educators to obtain funds for special projects. During this workshop, participants share grant resources and learn practical tips for creating successful proposals. **Cost:** \$20, includes lunch.

**Date/time:** Saturday, February 22, 8:30 am.- 5:00 pm.

### Dunes 201: History and Culture within the Dunes

Explore lifestyles of the Potawatomi Indians, early settlers, farmers and the dunes preservation movement as we weave history and culture into the dunes landscape.

**Cost:** \$62 **Date/time:** Begins Friday, October 25, 4:00 pm.; Ends Saturday October 26, 5:00 pm.

### Dunes 202: Dunes Critical Issues

Investigate some of the "hot" environmental issues within the National Lakeshore and learn how to use these issues to teach critical thinking skills to your students. Participants learn about exotic species, water quality problems, and other important topics facing park managers today. **Cost:** \$62 **Date/time:** Begins

Friday, April 26, 4:00 pm.; Ends Saturday April 27, 5:00 pm.

### Dunes 203: Fine Arts Focus

This week-long institute will showcase local artists who use the dunes and the natural world as inspiration for creative development. The dunes have a long history of artistic influences, from Carl Sandburg to Frank Dudley. Learn how you and your students can become inspired by the singing sands of the dunes.

**Cost:** \$225 **Date/time:** Begins Monday, July 7, 9:00 am.; Ends Friday, July 11, 1:00 pm.

Sponsored by:	Eastern National	Eastern National is a non-profit organization that promotes the historical, scientific, and conservation activities of the National Park Service. Eastern National serves as the National Lakeshore's cooperating association.
	FRIENDS of the Indiana Dunes	FRIENDS is a non-profit organization that sponsors a variety of park events and activities that enhance the understanding, appreciation, and enjoyment of the Indiana dunes.
	Great Lakes Research and Education Center	The Great Lakes Research and Education Center facilitates research in ten National Parks within the Great Lakes Region, and brings new knowledge about our natural and cultural resources to the eyes of the public.
	Indiana Dunes Environmental Learning Center	The Indiana Dunes Environmental Learning Center serves as an education center and environmental learning laboratory on the site of the National Park Service's Camp Good Fellow.
	Indiana Dunes National Lakeshore	Indiana Dunes National Lakeshore was established in 1966 to "to preserve for the educational, inspirational, and recreational use of the public certain portions of the Indiana dunes".
	Lake County Solid Waste Management District	Lake County Solid Waste Management District is a government entity created to develop a plan for the management of solid waste in Lake County, Indiana with an extensive environmental education program.
	Richardson Wildlife Sanctuary	Richardson Wildlife Sanctuary is a non-profit organization dedicated to education, research, and preservation of the natural history and ecology of the southern Lake Michigan region.
	Save the Dunes Conservation Fund	Save the Dunes Conservation Fund's mission is to protect and restore the Indiana dunes and surrounding natural resources through environmental research, legal safeguards, and strategic conservation initiatives.